

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number  
**WO 2005/049841 A1**

- (51) International Patent Classification<sup>7</sup>: C12N 15/82, C07K 14/435, C12N 15/11, 15/63
- (74) Agent: MEULEMANS, Wouter, L.J.; Technologiepark 38, B-9052 Gent (BE).
- (21) International Application Number: PCT/EP2004/013049
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 17 November 2004 (17.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/520,306 17 November 2003 (17.11.2003) US
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
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- Declaration under Rule 4.17:  
— of inventorship (Rule 4.17(iv)) for US only
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: INSECT RESISTANCE USING INHIBITION OF GENE EXPRESSION

(57) Abstract: The current invention provides methods to silence insect genes by using unpackaged dsRNA or siRNA, in one embodiment such dsRNA or siRNA is present in plant vascular tissue, preferably phloem, more particularly phloem sap, and the insect is a plant sap-sucking insect. Also provided are DNA sequences which when transcribed yield a double-stranded RNA molecule capable of reducing the expression of an essential gene of a plant sap-sucking insect, methods of using such DNA sequences and plants or plant cells transformed with such DNA sequences. Also provided is the use of cationic oligopeptides that facilitate the entry of dsRNA or siRNA molecules in insect cells, such as plant sap-sucking insect cells.

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